

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/574,194
Source: IFWP
Date Processed by STIC: 4/13/06

ENTERED



IFWP

RAW SEQUENCE LISTING

DATE: 04/13/2006

PATENT APPLICATION: US/10/574,194

TIME: 10:04:16

Input Set : A:\07917-259US1.txt

Output Set: N:\CRF4\04132006\J574194.raw

4 <110> APPLICANT: Urano, Fumihiko
 7 <120> TITLE OF INVENTION: METHODS FOR DIAGNOSING AND TREATING
 8 ENDOPLASMIC RETICULUM (ER) STRESS DISEASES
 11 <130> FILE REFERENCE: 07917-259US1
 C--> 13 <140> CURRENT APPLICATION NUMBER: US/10/574,194
 C--> 13 <141> CURRENT FILING DATE: 2006-03-28
 13 <150> PRIOR APPLICATION NUMBER: PCT/US2004/033516
 14 <151> PRIOR FILING DATE: 2004-10-12
 16 <150> PRIOR APPLICATION NUMBER: US 60/510,262
 17 <151> PRIOR FILING DATE: 2003-10-09
 19 <150> PRIOR APPLICATION NUMBER: US 60/519,736
 20 <151> PRIOR FILING DATE: 2003-11-12
 22 <150> PRIOR APPLICATION NUMBER: US 60/568,468
 23 <151> PRIOR FILING DATE: 2004-05-05
 26 <160> NUMBER OF SEQ ID NOS: 41
 28 <170> SOFTWARE: FastSEQ for Windows Version 4.0
 30 <210> SEQ ID NO: 1
 31 <211> LENGTH: 1761
 32 <212> TYPE: DNA
 33 <213> ORGANISM: Homo sapiens
 35 <400> SEQUENCE: 1
 36 ctcgagctat ggtggtggtg gcagccgcgc cgaacccggc cgacgggacc cctaaagttc 60
 37 tgcttctgtc ggggcagccc gcctccgccg ccggagcccc ggccggccag gccctgccgc 120
 38 tcatggtgcc agcccagaga ggggccagcc cggaggcagc gagcgggggg ctgccccagg 180
 39 cgcgcaagcg acagcgcctc acgcacctga gccccgagga gaaggcgctg aggaggaaac 240
 40 tgaaaaacag agtagcagct cagactgccg gagatcgaaa gaaggctcga atgagtgagc 300
 41 tggaacagca agtggttagat ttagaagaag agaaccaaaa acttttgcta gaaaatcagc 360
 42 ttttacgaga gaaaactcat ggcctttagt ttgagaacca ggagttaaga cagcgcttgg 420
 43 ggatggatgc cctggttgct gaagaggagg cggaagccaa ggggaatgaa gtgaggccag 480
 44 tggccgggtc tgctgagtc gcagcaggtg caggcccagt tgtcaccctc ccagaacatc 540
 45 tccccatgga ttctggcggg attgactctt cagattcaga gtctgatatc ctggtgggca 600
 46 ttctggacaa cttggaccca gtcattgtct tcaaatgccc tccccagag cctgccagcc 660
 47 tggaggagct cccagaggtc taccagaag gaccaggttc cttaccagcc tccctttctc 720
 48 tgtcagtggg gacgtcatca gccaaactgg aagccattaa tgaactaatt cgttttgacc 780
 49 acatatatac caagccccta gtcttagaga taccctctga gacagagagc caagctaattg 840
 50 tggtagtgaa aatcgaggaa gcacctctca gcccctcaga gaatgatcac cctgaattca 900
 51 ttgtctcagt gaaggaagaa cctgtagaag atgacctcgt tccggagctg ggtatctcaa 960
 52 atctgctttc atccagccac tgcccaaagc catcttctct cctactggat gcttacagtg 1020
 53 actgtggata cgggggttcc ctttcccatc tcagtgcacat gtctctctct cttggtgtaa 1080
 54 accattcttg ggaggacact tttgccaatg aactctttcc ccagctgatt agtgtctaag 1140
 55 gaatgatcca atactgttgc ctttttcctt gactattaca ctgcctggag gatagcagag 1200
 56 aagcctgtct gtacttcatt caaaaagcca aaatagagag tatacagtc tagagaattc 1260
 57 ctctatttgt tcagatctca tagatgaccc ccaggtattg tcttttgaca tccagcagtc 1320

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58 caaggtattg agacatatta ctggaagtaa gaaatattac tataattgag aactacagct 1380
59 tttaagattg tacttttattc ttaaaagggg ggtagttttc cctaaaatac ttattatgta 1440
60 agggtcatta gacaaatgtc ttgaagtaga catggaattt atgaatgggt ctttatcatt 1500
61 tctcttcccc ctttttgga tcctggcttg cctccagttt taggtccttt agtttgcttc 1560
62 tgtaagcaac gggaacacct gctgaggggg ctctttccct catgtatact tcaagtaaga 1620
63 tcaagaatct tttgtgaaat tatagaaatt tactatgtaa atgcttgatg gaattttttc 1680
64 ctgctagtgt agcttctgaa aggtgctttc tccatttatt taaaactacc catgcaatta 1740
65 aaaggccttc gtggcctcga g 1761
67 <210> SEQ ID NO: 2
68 <211> LENGTH: 376
69 <212> TYPE: PRT
70 <213> ORGANISM: Homo sapiens
72 <400> SEQUENCE: 2
73 Met Val Val Val Ala Ala Ala Pro Asn Pro Ala Asp Gly Thr Pro Lys
74 1 5 10 15
75 Val Leu Leu Leu Ser Gly Gln Pro Ala Ser Ala Ala Gly Ala Pro Ala
76 20 25 30
77 Gly Gln Ala Leu Pro Leu Met Val Pro Ala Gln Arg Gly Ala Ser Pro
78 35 40 45
79 Glu Ala Ala Ser Gly Gly Leu Pro Gln Ala Arg Lys Arg Gln Arg Leu
80 50 55 60
81 Thr His Leu Ser Pro Glu Lys Ala Leu Arg Arg Lys Leu Lys Asn
82 65 70 75 80
83 Arg Val Ala Ala Gln Thr Ala Arg Asp Arg Lys Lys Ala Arg Met Ser
84 85 90 95
85 Glu Leu Glu Gln Gln Val Val Asp Leu Glu Glu Glu Asn Gln Lys Leu
86 100 105 110
87 Leu Leu Glu Asn Gln Leu Leu Arg Glu Lys Thr His Gly Leu Val Val
88 115 120 125
89 Glu Asn Gln Glu Leu Arg Gln Arg Leu Gly Met Asp Ala Leu Val Ala
90 130 135 140
91 Glu Glu Glu Ala Glu Ala Lys Gly Asn Glu Val Arg Pro Val Ala Gly
92 145 150 155 160
93 Ser Ala Glu Ser Ala Ala Gly Ala Gly Pro Val Val Thr Pro Pro Glu
94 165 170 175
95 His Leu Pro Met Asp Ser Gly Gly Ile Asp Ser Ser Asp Ser Glu Ser
96 180 185 190
97 Asp Ile Leu Leu Gly Ile Leu Asp Asn Leu Asp Pro Val Met Phe Phe
98 195 200 205
99 Lys Cys Pro Ser Pro Glu Pro Ala Ser Leu Glu Glu Leu Pro Glu Val
100 210 215 220
101 Tyr Pro Glu Gly Pro Ser Ser Leu Pro Ala Ser Leu Ser Leu Ser Val
102 225 230 235 240
103 Gly Thr Ser Ser Ala Lys Leu Glu Ala Ile Asn Glu Leu Ile Arg Phe
104 245 250 255
105 Asp His Ile Tyr Thr Lys Pro Leu Val Leu Glu Ile Pro Ser Glu Thr
106 260 265 270
107 Glu Ser Gln Ala Asn Val Val Val Lys Ile Glu Glu Ala Pro Leu Ser
108 275 280 285

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```

109 Pro Ser Glu Asn Asp His Pro Glu Phe Ile Val Ser Val Lys Glu Glu
110      290      295      300
111 Pro Val Glu Asp Asp Leu Val Pro Glu Leu Gly Ile Ser Asn Leu Leu
112 305      310      315      320
113 Ser Ser Ser His Cys Pro Lys Pro Ser Ser Cys Leu Leu Asp Ala Tyr
114      325      330      335
115 Ser Asp Cys Gly Tyr Gly Gly Ser Leu Ser Pro Phe Ser Asp Met Ser
116      340      345      350
117 Ser Leu Leu Gly Val Asn His Ser Trp Glu Asp Thr Phe Ala Asn Glu
118      355      360      365
119 Leu Phe Pro Gln Leu Ile Ser Val
120      370      375
122 <210> SEQ ID NO: 3
123 <211> LENGTH: 1787
124 <212> TYPE: DNA
125 <213> ORGANISM: Homo sapiens
127 <400> SEQUENCE: 3
128 ctcgagctat ggtggtggtg gcagccgcgc cgaaccgggc cgacgggacc cctaaagtgc      60
129 tgcttctgtc ggggcagccc gcctccgcgc cggagagccc ggccggccag gccctgccgc      120
130 tcatggtgcc agcccagaga ggggccagcc cggaggcagc gagcgggggg ctgccccagg      180
131 cgcgcaagcg acagcgcttc acgcacctga gccccgagga gaaggcgctg aggaggaaac      240
132 tgaaaaacag agtagcagct cagactgcca gagatcgaaa gaaggctcga atgagtgagc      300
133 tggaacagca agtggtagat ttagaagaag agaaccaaaa acttttgcta gaaaatcagc      360
134 ttttacgaga gaaaactcat ggccttgtag ttgagaacca ggagttaaga cagcgcttgg      420
135 ggatggatgc cctggttgct gaagaggagg cggaagccaa ggggaatgaa gtgaggccag      480
136 tgcccggttc tgctgagtc gcagcactca gactacgtgc acctctgcag caggtgcagg      540
137 cccagttgtc acccctccag aacatctccc catggattct ggcggtattg actcttcaga      600
138 ttcagagtct gatatcctgt tgggcattct ggacaacttg gaccagtcga tgttcttcaa      660
139 atgcccttcc ccagagcctg ccagcctgga ggagctccca gaggtctacc cagaaggacc      720
140 cagttcctta ccagcctccc tttctctgtc agtggggacg tcatcagcca agctggaagc      780
141 cattaatgaa ctaattcggt ttgaccacat atataccaag ccctagtct tagagatacc      840
142 ctctgagaca gagagccaag ctaatgtggt agtgaaaatc gaggaagcac ctctcagccc      900
143 ctcagagaat gatcacctg aattcattgt ctcagtgaag gaagaacctg tagaagatga      960
144 cctcgttccg gagctgggta tctcaaactc gctttcatcc agccactgcc caaagccatc     1020
145 ttctgccta ctggatgctt acagtgactg tggatacggg ggttcccttt cccattcag      1080
146 tgacatgtcc tctctgcttg gtgtaaacca ttcttgggag gacacttttg ccaatgaact      1140
147 ctttccccag ctgattagt tctaaggaat gatccaatac tgttgccctt ttccttgact      1200
148 attacactgc ctggaggata gcagagaagc ctgtctgtac ttcattcaaa aagccaaaat      1260
149 agagagtata cagtcctaga gaattcctct atttgttcag atctcataga tgacccccag      1320
150 gtattgtctt ttgacatcca gcagtccaag gtattgagac atattactgg aagtaagaaa      1380
151 tattactata attgagaact acagctttta agattgtact tttatcttaa aagggtggta      1440
152 gttttcccta aaatacttat tatgtaaggg tcattagaca aatgtcttga agtagacatg      1500
153 gaatttatga atggttcttt atcatttctc tcccccttt ttggcactct ggcttgccct      1560
154 cagttttagg tccttttagt tgcttctgta agcaacggga acacctgctg agggggctct      1620
155 ttcctcatg tatacttcaa gtaagatcaa gaatcttttg tgaaattata gaaatttact      1680
156 atgtaaatgc ttgatggaat tttttcctgc tagtgtagct tctgaaaggt gctttctcca      1740
157 tttatttaaa actacccatg caattaaaag gccttcgtgg cctcgag      1787
159 <210> SEQ ID NO: 4
160 <211> LENGTH: 261

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161 <212> TYPE: PRT
162 <213> ORGANISM: Homo sapiens
164 <400> SEQUENCE: 4
165 Met Val Val Val Ala Ala Pro Asn Pro Ala Asp Gly Thr Pro Lys
166 1 5 10 15
167 Val Leu Leu Leu Ser Gly Gln Pro Ala Ser Ala Ala Gly Ala Pro Ala
168 20 25 30
169 Gly Gln Ala Leu Pro Leu Met Val Pro Ala Gln Arg Gly Ala Ser Pro
170 35 40 45
171 Glu Ala Ala Ser Gly Gly Leu Pro Gln Ala Arg Lys Arg Gln Arg Leu
172 50 55 60
173 Thr His Leu Ser Pro Glu Glu Lys Ala Leu Arg Arg Lys Leu Lys Asn
174 65 70 75 80
175 Arg Val Ala Ala Gln Thr Ala Arg Asp Arg Lys Lys Ala Arg Met Ser
176 85 90 95
177 Glu Leu Glu Gln Gln Val Val Asp Leu Glu Glu Glu Asn Gln Lys Leu
178 100 105 110
179 Leu Leu Glu Asn Gln Leu Leu Arg Glu Lys Thr His Gly Leu Val Val
180 115 120 125
181 Glu Asn Gln Glu Leu Arg Gln Arg Leu Gly Met Asp Ala Leu Val Ala
182 130 135 140
183 Glu Glu Glu Ala Glu Ala Lys Gly Asn Glu Val Arg Pro Val Ala Gly
184 145 150 155 160
185 Ser Ala Glu Ser Ala Ala Leu Arg Leu Arg Ala Pro Leu Gln Gln Val
186 165 170 175
187 Gln Ala Gln Leu Ser Pro Leu Gln Asn Ile Ser Pro Trp Ile Leu Ala
188 180 185 190
189 Val Leu Thr Leu Gln Ile Gln Ser Leu Ile Ser Cys Trp Ala Phe Trp
190 195 200 205
191 Thr Thr Trp Thr Gln Ser Cys Ser Ser Asn Ala Leu Pro Gln Ser Leu
192 210 215 220
193 Pro Ala Trp Arg Ser Ser Gln Arg Ser Thr Gln Lys Asp Pro Val Pro
194 225 230 235 240
195 Tyr Gln Pro Pro Phe Leu Cys Gln Trp Gly Arg His Gln Pro Ser Trp
196 245 250 255
197 Lys Pro Leu Met Asn
198 260
200 <210> SEQ ID NO: 5
201 <211> LENGTH: 26
202 <212> TYPE: DNA
203 <213> ORGANISM: Homo sapiens
205 <400> SEQUENCE: 5
206 ctcagactac gtgcacctct gcagca
208 <210> SEQ ID NO: 6
209 <211> LENGTH: 210
210 <212> TYPE: PRT
211 <213> ORGANISM: Homo sapiens
213 <400> SEQUENCE: 6
214 Gly Ala Gly Pro Val Val Thr Pro Pro Glu His Leu Pro Met Asp Ser

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RAW SEQUENCE LISTING

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Input Set : A:\07917-259US1.txt

Output Set : N:\CRF4\04132006\J574194.raw

```

215 1           5           10           15
216 Gly Gly Ile Asp Ser Ser Asp Ser Glu Ser Asp Ile Leu Leu Gly Ile
217           20           25           30
218 Leu Asp Asn Leu Asp Pro Val Met Phe Phe Lys Cys Pro Ser Pro Glu
219           35           40           45
220 Pro Ala Ser Leu Glu Glu Leu Pro Glu Val Tyr Pro Glu Gly Pro Ser
221           50           55           60
222 Ser Leu Pro Ala Ser Leu Ser Leu Ser Val Gly Thr Ser Ser Ala Lys
223 65           70           75           80
224 Leu Glu Ala Ile Asn Glu Leu Ile Arg Phe Asp His Ile Tyr Thr Lys
225           85           90           95
226 Pro Leu Val Leu Glu Ile Pro Ser Glu Thr Glu Ser Gln Ala Asn Val
227           100          105          110
228 Val Val Lys Ile Glu Glu Ala Pro Leu Ser Pro Ser Glu Asn Asp His
229           115          120          125
230 Pro Glu Phe Ile Val Ser Val Lys Glu Glu Pro Val Glu Asp Asp Leu
231           130          135          140
232 Val Pro Glu Leu Gly Ile Ser Asn Leu Leu Ser Ser Ser His Cys Pro
233 145          150          155          160
234 Lys Pro Ser Ser Cys Leu Leu Asp Ala Tyr Ser Asp Cys Gly Tyr Gly
235           165          170          175
236 Gly Ser Leu Ser Pro Phe Ser Asp Met Ser Ser Leu Leu Gly Val Asn
237           180          185          190
238 His Ser Trp Glu Asp Thr Phe Ala Asn Glu Leu Phe Pro Gln Leu Ile
239           195          200          205
240 Ser Val
241           210

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243 <210> SEQ ID NO: 7

244 <211> LENGTH: 95

245 <212> TYPE: PRT

246 <213> ORGANISM: Homo sapiens

248 <400> SEQUENCE: 7

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249 Leu Arg Leu Arg Ala Pro Leu Gln Gln Val Gln Ala Gln Leu Ser Pro
250 1           5           10           15
251 Leu Gln Asn Ile Ser Pro Trp Ile Leu Ala Val Leu Thr Leu Gln Ile
252           20           25           30
253 Gln Ser Leu Ile Ser Cys Trp Ala Phe Trp Thr Thr Trp Thr Gln Ser
254           35           40           45
255 Cys Ser Ser Asn Ala Leu Pro Gln Ser Leu Pro Ala Trp Arg Ser Ser
256           50           55           60
257 Gln Arg Ser Thr Gln Lys Asp Pro Val Pro Tyr Gln Pro Pro Phe Leu
258 65           70           75           80
259 Cys Gln Trp Gly Arg His Gln Pro Ser Trp Lys Pro Leu Met Asn
260           85           90           95

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262 <210> SEQ ID NO: 8

263 <211> LENGTH: 24

264 <212> TYPE: DNA

265 <213> ORGANISM: Artificial Sequence

267 <220> FEATURE:

RAW SEQUENCE LISTING ERROR SUMMARY
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:20; Xaa Pos. 6

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/574,194

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Input Set : A:\07917-259US1.txt

Output Set: N:\CRF4\04132006\J574194.raw

L:13 M:270 C: Current Application Number differs, Replaced Current Application No

L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:408 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20 after pos.:0